

## **Coffey County**

## Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors 5/22/2018

Using the most recent IMPLAN data available (2016) adjusted for 2018, 19 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Coffey County economy.<sup>1</sup>

These 19 sectors have a total direct output of approximately \$108.6 million and support 598 jobs in Coffey County. Running the model for all 19 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Coffey County Economy									
Impact Type <sup>2</sup>	Employment	% Employment	Total Value Added <sup>3</sup>	Total Value Added % of Gross Regional Product <sup>4</sup>	Output <sup>5</sup>	Output % of Gross Regional Product			
Direct Effect	598.1	9.51%	\$34,527,676	4.29%	\$108,573,616	13.49%			
Indirect Effect	86.3	1.37%	\$6,730,580	0.84%	\$12,849,994	1.60%			
Induced Effect	40.4	0.64%	\$2,887,356	0.36%	\$5,342,117	0.66%			
Total Effect	724.8	11.52%	\$44,145,612	5.49%	\$126,765,727	15.75%			

As shown in the above table, agriculture, food, and food processing sectors support **725 jobs**, or **11.52%** of the entire workforce in the county. These sectors provide a total economic contribution of approximately **\$126.8** million, roughly **15.75%** of the economy.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 19 agriculture, food, and food processing sectors is approximately \$44.1 million, or 5.49% of the GRP. This indicates that personal income, business income, and taxes generated by these sectors account for 5.49% of the total economy.

The following tables document the top industries affected by employment and output, as well as a listing of all industries that were analyzed.

<sup>1</sup> Article on building a contribution analysis in IMPLAN that avoids double counting: <a href="http://www.implan.com/index.php?option=com">http://www.implan.com/index.php?option=com</a> content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70

<sup>2</sup> Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

<sup>3</sup> Value added = labor income + indirect business taxes + other property type income.

<sup>4</sup> GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

<sup>5</sup> Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top employer with **259 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Coffey County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment					
Sector	Total Employment	Total Output			
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	259.2	\$29,574,535			
Animal production, except cattle and poultry and eggs	135.5	\$17,773,459			
All other crop farming	87.8	\$6,696,758			
Grain farming	30.3	\$11,079,476			
Oilseed farming	23.0	\$24,081,189			
Wholesale trade	19.3	\$3,788,074			
Landscape and horticultural services	18.2	\$1,117,383			
Support activities for agriculture and forestry	18.1	\$810,587			
Dairy cattle and milk production	18.1	\$11,042,889			
Truck transportation	14.9	\$2,353,222			

The beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector directly contributes approximately **\$29.6 million** to the Coffey County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output				
Sector	Total Employment	Total Output		
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	259.2	\$29,574,535		
Oilseed farming	23.0	\$24,081,189		
Animal production, except cattle and poultry and eggs	135.5	\$17,773,459		
Grain farming	30.3	\$11,079,476		
Dairy cattle and milk production	18.1	\$11,042,889		
All other crop farming	87.8	\$6,696,758		
Wholesale trade	19.3	\$3,788,074		
Truck transportation	14.9	\$2,353,222		
Meat processed from carcasses	4.2	\$2,136,017		
Dog and cat food manufacturing	1.2	\$1,741,265		

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Coffey County economy.

All Agriculture, Food, and Food Processing Sectors				
Sector	Total Employment	Total Output		
Oilseed farming	23.0	\$24,081,188.60		
Grain farming	30.3	\$11,079,475.59		
Fruit farming	0.0	\$4,238.30		
Tree nut farming	0.0	\$10.87		
Greenhouse, nursery, and floriculture production	4.6	\$1,064,889.81		
All other crop farming	87.8	\$6,696,758.38		
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	259.2	\$29,574,534.83		
Dairy cattle and milk production	18.1	\$11,042,889.15		
Poultry and egg production	0.1	\$84,946.82		
Animal production, except cattle and poultry and eggs	135.5	\$17,773,459.30		
Commercial logging	1.9	\$90,660.28		
Commercial hunting and trapping	1.1	\$23,165.57		
Dog and cat food manufacturing	1.2	\$1,741,264.84		
Meat processed from carcasses	4.2	\$2,136,017.36		
Bread and bakery product, except frozen, manufacturing	4.2	\$465,921.25		
Frozen cakes and other pastries manufacturing	0.2	\$36,913.61		
Farm machinery and equipment manufacturing	2.9	\$1,092,388.96		
Veterinary services	5.5	\$467,508.82		
Landscape and horticultural services	18.2	\$1,117,383.15		

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Coffey County, the retail sector was omitted.